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Rural Lines

RURAL ELECTRIFICATION ADMINISTRATION • U. S. DEPARTMENT OF AGRICULTURE

JANUARY
1958

Getting A Line On
OUTAGES
See Page 3



A Message from the



ADMINISTRATOR

Electrical engineers use the term "feedback," and I understand it has been borrowed by management specialists. To management men, it means a method for getting back information on the effect of policies and practices. Then they can be modified to get the desired results.

For four days last month, I had the privilege of meeting with the REA Electric and Telephone Advisory Committees in Washington. These men are directors and managers of cooperatives and independent companies which provide much of rural America with electric and telephone service. They are an important part of REA's feedback circuit. We talked together frankly and openly about whether REA practices and policies are in the best interest of all REA borrowers.

Naturally, we assume that our practices are going to serve borrowers when we send them out of Washington, but we are not always sure whether they hit the target. Members of our advisory committees—all of them experts at the grassroots level—are only too happy to tell us. We listen to them and we give serious consideration to their advice and suggestions.

We do not always agree, of course, but I often find that the sessions where disagreements occur are the most informative we have—for all of us. I cannot overestimate the helpful contribution of these advisers toward making administration of the REA electric and telephone programs truly two-way circuits—for both lender and borrower.

Sincerely,

A handwritten signature in cursive script that reads "David G. Hamil". The signature is written in dark ink and is positioned below the word "Sincerely,".

Administrator.

Improving Service Reliability

by Howard M. Evans, Engineer
Delta Electric Power Association
Greenwood, Mississippi

Our system serves some 20,000 consumers from more than 5,000 miles of line. It ranges from the flat, open country of the Mississippi Delta area to very hilly terrain with excessive amounts of right-of-way. Frankly, until 1956, we had never attempted to determine the basic causes of our service interruptions. We knew only that we were giving as good or better service in our area as the other power suppliers operating in the same territory.

Today we feel that our service was not good enough. Our present farm loads have grown dependent on continuity of service, and failure to provide it can prove costly to both consumer and power distributor. Now our goal is 3 to 4 hours of average outage time a year. Perhaps it might be pushed down as low as 2 hours per consumer annually. Of course, a goal like this is meaningless unless you know the present average outage time and the various causes behind it.

Some time ago, we expanded our standard outage report forms to indicate the number of consumers affected by each power interruption, as well as the total outage time. The product of these two figures gave us the consumer outage time for each interruption. We also kept records on the actual cause of each outage, so that over a period of

time we could tabulate the total consumer outage time for each specific cause. From this tabulation, we could recommend corrective measure and take the necessary action.

Our system is divided into 4 districts for operational purposes, although in some of the districts there is more than one source of power. In our study, an analysis of outages was made for each district, rather than for each power source.

Eleven categories were set up to indicate causes of various outages. (See Fig. 1.) Each cause could have been subdivided into many more, but we felt that, in a study of this type, details could become burdensome. Power source failure due to trouble on the supplier's system is included under "damage by others."

We decided to tabulate the information by districts, with cumulative totals for the whole system. The data were grouped so that the

Farmers depend on uninterrupted power; frequent outages wear their patience thin.





Prolonged outages are more than inconvenient; they can mean heavy losses.

consumer outage time by districts for each of the 11 categories was shown and ranked numerically with its percentage of the total outage time. This same method was used for the system totals.

As in any study of this nature, a number of difficulties cropped up. Information received from the field was not always complete; in many cases, placing outages in the proper category took some guesswork. Total outage time was sometimes difficult to establish because we knew only the time the trouble was reported, not the time it occurred. It also was hard to estab-



The Mississippi co-op expanded its outage report form to get at basic causes.

lish the total number of consumers affected by certain outages, and field estimates had to be accepted. But in spite of these inaccuracies, we feel that the tabulations present a good picture of the major causes of outage time, as well as such related information as average hour of outage per consumer.

In looking at Figure 1, it is evident that equipment failure was the number one cause of outage time. This category includes many things which can cause outages, such as poles, insulators, conductors, reclosers and clamps. Although substantial, we do not feel

Delta Electric Power Association

<i>Cause of Outage</i>	<i>Consumer Hr. Outage</i>	<i>Percent</i>
Equipment Failure	50,991.5	33.9
Lightning, Wind, and Storm	33,117	22.0
Damage by Others	22,314.5	14.9
Deliberate for Maint., Cons't., Repair	14,302	9.5
Bad Right-of-Way	10,115	6.7
Unknown	7,993.5	5.3
Transformer Failure	4,656	3.1
Overload	2,370	1.6
Faulty Secondary and Service Connections	2,185.5	1.5
Consumer Wiring Trouble	1,127.5	.8
House Burned	1,039.5	.7
	<hr/> 150,212	<hr/> 100.0

Figure I. Consumer Hour Outage Analysis, 1956.

that outages caused by equipment failure were nearly as heavy as they might have been, thanks to corrective measures we have employed in our system.

Our basic line design criteria have been heavier than usually used in our area, but we are subject to severe ice storms every 6 or 7 years. Heavy construction on selected major feeders has paid dividends which more than justify the additional investment involved.

For the past 4 years, we have operated a pole inspection crew during the summer months which has located and replaced many decayed poles. We also bring all heavy-duty three-phase reclosers—which control major feeder circuits and which are subjected to high fault currents—into the shop at least once a year for checking and maintenance. We are enlarging this program to make sure no device which interrupts fault current will be left on the line more than 2 years without maintenance. These things cost money, but it is money spent wisely.

The number 2 cause of outage time is storms. We cannot change the weather, but a well-built dis-

During the summer, a regular inspection crew replaces decayed and rotted poles.



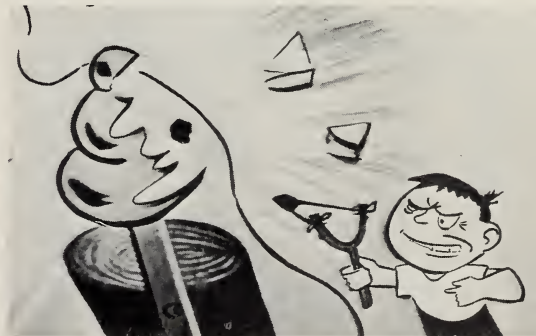
Regular preventive maintenance has cut down on heavy-duty recloser failures.

tribution system in good repair and with proper automatic sectionalizing can go a long way toward withstanding the elements.

The number 3 ranking cause of trouble is "damage by others," which accounted for 14.9 percent of the outage time. Power supplier failures accounted for nearly half of this figure.

Deliberate outages due to maintenance, construction, and repair work was the number 4 cause of outages, accounting for 9.5 percent of the outage time. We feel we can eliminate many outages from this cause by increasing the use of hot line tools for maintenance and re-

Damage by others accounted for one out of seven outages in the Delta survey.





Crews who can repair lines while they are hot have reduced intentional outages.

pair jobs that have been performed "cold." Since this change requires careful training of the crew and reliable supervision, we are moving into this program slowly. One crew is trained now and equipped to perform hot line work, and recently we purchased our second set of hot line tools.

Outages due to bad right-of-way was the number 5 ranking cause of outage time. We think we have a good program of right-of-way maintenance now, but it could be improved. A full-time crew clears new right-of-way and recuts the old, and we have just started using a promising chemical treatment in areas of heavy growth.

A full-time crew now keeps rights-of-way clear; new chemicals are employed.



Unknown causes account for 5.3 percent of the total consumer hour outage time. These usually occur when a serviceman closes a recloser and it doesn't trip again.

Transformer failure ranks seventh. We have been unable to discover whether our outages from this cause are excessive for this part of the country. Summer temperatures remain high over a long period, and peak loading occurs during this season. We replace overloaded units when conditions justify it, knowing that sustained overloading of a unit affects its life expectancy. However, a good cheap means of checking transformer loading has not yet been developed.

We are convinced that a new program of detailed line inspection will contribute to improving the continuity of service on our system. This includes a pole-by-pole inspection of the system to determine maintenance needs — from tightening loose hardware to replacing entire structures. These needs are tabulated weekly and passed on to a crew to perform the work.

The whole system of the Delta Electric Power Association had an average hour outage per consumer during 1956 of 7.55 hours and a total consumer hour outage time of 150,211. We do not feel that this record is particularly good, and we know that improvements can be made by utilization of the information obtained from our study. The time and effort spent on this analysis and its continuation will enable us to provide our consumers with a good reliable standard of service. In turn, public relations and load growth will be improved.



UNIVERSITY ON WHEELS

When a co-op buys a 38-passenger, air-conditioned bus, employs personnel to conduct tours, and carries people free of charge from county to county and state to state, its board of directors must have some pretty definite goal in mind. The Southern Pine Electric Power Association, Taylorsville, Miss., has done just that, and its directors expect that "the end result will be a more enlightened and informed rural population."

As Manager H. L. Pickering sees it, the ultimate purpose of the bus tours is to develop new agricultural skills to lift the economic standing of the 11 counties served by Southern Pine, a co-op with 20,000 connected consumers.

For example, the first bus trip last July took Smith County 4-H'ers on a 3-day visit to the State Training Center at Ocean Springs. Since then, the bus has made 15 other trips, transportation-free, for various groups in the area.

On its longest journey, the bus carried a full load of county and as-

sociate county agents, district agents, and a state Extension Service specialist to the National County Agents Convention in Boston, Mass. Wives accompanied ten of them. Stops along the way gave agents a chance to do some sight-seeing and to study new farm practices applicable in Mississippi.

Home again, this university on wheels took off for a tour of five southern states. This time, passengers were Covington County home demonstration club women, who wanted to find out how other women made hooked rugs, chenille bedspreads, baskets, pottery and other handicrafts that can be sold.

Tours are now scheduled up to mid-August 1958. A trip to Arkansas in January will give an adult group opportunity to study soil conservation and forest management practices. Several FFA chapters and an adult group will make trips to study dairying, beef cattle, poultry, hog, and sheep production methods. For two weeks next August, Forest County's 4-H



En route to Boston convention, Mississippi county agents stop to visit Washington Monument.

Champion Educational Tour will visit colleges, experiment stations, and farms in a circle bus tour of 9 southern states. Most of the bus trips are in the South, but one FFA chapter is swinging up the east coast into Canada and back by

way of Michigan and Missouri to study livestock and poultry production.

Nine farm agencies are co-operating in this educational bus-tour program. Coordinating councils in the various counties are co-sponsors and co-workers on tour arrangements. Southern Pine furnishes an agricultural and industrial adviser, Jack A. Warren, Jr., who has full charge of tours. The co-op also furnishes a driver, and a relief driver, if necessary, as well as all operating expenses.

All rural farm people living in co-op boundaries are eligible to make tours. Adjoining co-ops may borrow the bus and sponsor tours by reimbursing all operating and overhead expenses.

Southern Pine's board of directors adopted 27 rules and regulations for the tour program. These eliminate the use of the bus for pleasure or vacation trips, establish trip-insurance policies, and set up an application procedure for use.

Plastic Wiring Exhibit Tours Puerto Rico

A mobile plastic house which shows details of a recommended wiring installation has helped the Puerto Rico Water Resources Authority sell more than 2,500 rural home wiring contracts. The trailer doubles as a speakers' platform. Below, the Honorable Luis Muñoz Marín, Governor of Puerto Rico, stands on it as he orders the switch thrown at energization ceremonies at Salinas, P. R., last fall.



Iowa's Biggest Wire-Rama

Nearly 50 local organizations and business firms worked together last fall to bring the need for adequate farm wiring forcefully to the attention of 1500 western Iowa farmers.

Led by the Nishnabotna Valley Rural Electric Cooperative, at Harlan, Iowa, electrical dealers and contractors, insurance companies, utility personnel, and educators put in a full year of advance planning to make a success of a 2-day combined Wire-Rama and Soil Conservation field day. Their joint efforts and attention to detail were rewarded with a bigger turnout than for either of Western Iowa's two earlier wiring shows.

The Wire-Rama and terracing demonstration were held on the Shelby, Iowa, farm of Franz Haas, a co-op director. Co-op Manager J. Dean Jorgensen, 11 co-op employees, and 2 employees of the Iowa Power and Light Co. guided visitors through exhibits in 2 houses and 7 farm buildings.

Farm Is Typical

Haas' 250-acre farm was selected because it was typical in size and quality of other farms in the area. Since Haas obtained central station service in 1938, he has gradually added new electric appliances and equipment. Last year, when he decided to go "all-electric" and convert from oil stoves to electric heating, he found that his old wiring system needed modernizing, not only in the house, but also in farm buildings.



Franz Haas shows time-lag fuse above outlet to fellow-director Arnold Christensen. Fuse protects drill press motor.

Raises Livestock

Haas now has a Grade A dairy with electric milking equipment and a bulk milk tank to handle milk from 15 to 30 Holsteins. He broods 250 to 300 pigs annually with electric heat lamps. Electric fences, a drive-over 3-wire electric gate, float-controlled water troughs with electric water warmers, and automatic pressure water systems simplify livestock raising. Haas feeds 25 Aberdeen Angus cattle.

Seed corn produced on the farm now is dried with an electric motor-driven fan which forces air or heated air through it. Haas processes seed corn with an electrically powered grader and a seed treater and sacker. Elevating equipment is powered by electric motors. His shop includes all types of electric power tools—air compressor, welder, drill press, saws, and grinders.

The demonstration farm has a 400-amp main service.

HOW MUCH FOR LIQUID RESERVES?



You Have to Walk a Tightrope

**by Floyd Jones, Manager,
Gibson County Electric Membership Corp.,
Trenton, Tenn.**

The following excerpts are from a talk given by Mr. Jones last fall at a cooperative regional meeting in Mobile, Ala., in which he offered one approach to the problem of setting up adequate liquid reserves.

Are there any formulas by which we can determine with finality how much to place in liquid reserves?

Unfortunately, there are probably none which will work for every cooperative. All we can do is to discuss judgments and experiences and from these arrive at a few collective conclusions. These conclusions will be different in various sections of the Nation.

First we must consider the cost changes that have occurred over the years as far as building electric plant is concerned. We need to remember that plant built in 1939 will cost almost twice as much to replace today as it did back then.

Is there any relation between the amount of liquid reserve and our depreciation expense which goes into the reserve for depreciation each month? Depreciation expense for each period is the amount of plant which you estimate is being used up at original cost by your members. It is not necessary that you place in liquid reserve that amount. It is important to keep in mind, however, that depreciation expense is related to liquid reserve.

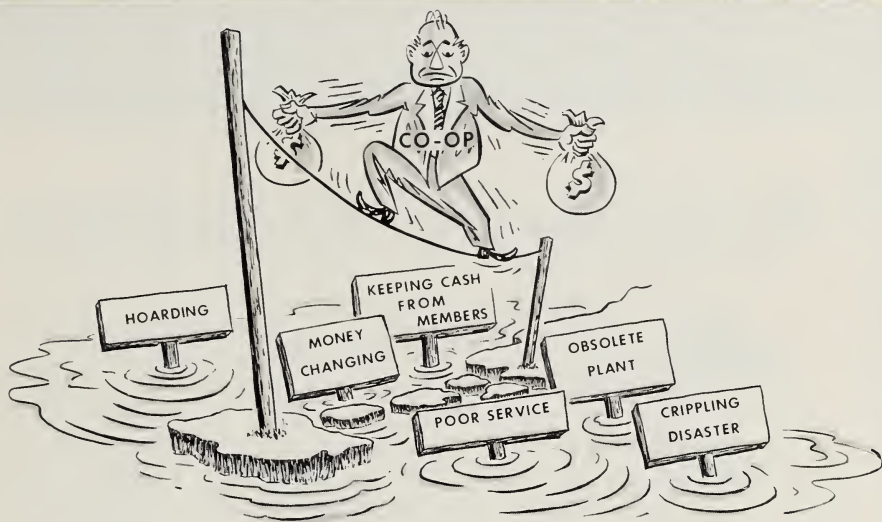
Let's say that you are investing all your depreciation expense in

system improvements, with a depreciation rate of $3\frac{1}{2}$ percent. (This would be an extreme position, and yet some of us are doing just that.) In such a case, without retirements, the plant would be increased some 35 percent in 8 to 9 years. If you continue this policy, 40 percent of your plant at any one time would not be older than 10 years, even with retirements. On the other hand, if only half your depreciation expense is spent for system improvements, 20 percent of your plant has been built from these funds in 10 years.

REA Recommends Minimum

REA recommends that a minimum of 1.08 percent of value of plant be placed in renewals and replacement liquid reserves each year, but it doesn't say whether or not this money should be taken immediately from the fund if needed. Neither does it say to what point the maximum fund should be built up.

How do advance payments fit into this picture? They are desirable, of course, to save interest and improve credit standing. Now I am a great believer in paying off practically all of our debt as



quickly as possible, but these prepayments are not immediately available in an emergency. Therefore, they do not answer our requirements here.


Can we wrap all of this into one neat package from a management viewpoint? (The package may look neat to me, but if it doesn't to you, don't accept it.) We should look at our reserve for depreciation and place one-half of that in liquid reserve funds as quickly as we can. When the reserve for depreciation levels out at approximately 30 percent of original cost of plant—as it probably will—we will then have some 15 percent of our cost of plant in liquid reserve.

If, by chance, your system is subject to unusual hazard of any kind, you might build it up to 25 percent, but I believe the experience on average system is that not more than 10 to 12 percent of plant may be destroyed by a natural disaster at any one time. This still leaves a small amount for providing the funds necessary to build plant required by unusual load growth in any one year, a necessary factor to consider as far as the amount of reserves is concerned.


Is there any reason why we should not, under normal conditions, have more than 15 percent in liquid reserves? I know that with present interest rates on investments, it looks attractive to do just that, but that makes us a financial institution and not a service institution. It is our purpose and excuse for being to serve our members—and not to be money changers.

Why is this question of liquid reserves so important—and so difficult? First, because there should be at all times liquid reserves to restore service after any disaster or catastrophe. Second, there should be liquid reserves held to restore plant at the end of its useful life. With today's high costs, depreciation charges based upon original cost will not completely restore it.


On the other hand, we do not want to be accused of hoarding cash for its own sake—cash that belongs to our members, cash that we may owe on long-term debt. Second, we do not wish to build up a large cash reserve that would be attractive to those who would liquidate our system. Between these two judgments, we must walk a tightrope.




Annual Meeting EXCHANGE




GOING, GOING—All 14 co-ops on the route of the Arkansas annual meeting caravan last summer entertained crowds and displayed new product features with appliance auctions. To publicize their brand names, distributors provided appliances and equipment for sale to the highest bidder. Some 90,000 consumers competed for TVs, washers, air conditioners, ranges, pumps, and water heaters.



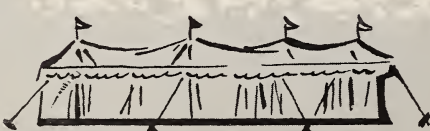
SIGNS OF GROWTH—The October Annual Meeting issue of *Merivether Lewis Electric Co-op News* gave consumers around Centerville, Tenn., a look at some signs of growth and progress in the service area. Six pages of photos showed the more important new structures built during the last 5 years in each of the co-op's 5 county-wide districts. Included were 33 shots of schools, factories, swimming pools, clinics, gyms, athletic fields, public works, and co-op offices. In a front-cover letter, Manager P. H. Tidwell called for action in attracting new enterprise, advised that "we must have more new industry and business to give our young people the opportunity to stay at home and prosper."

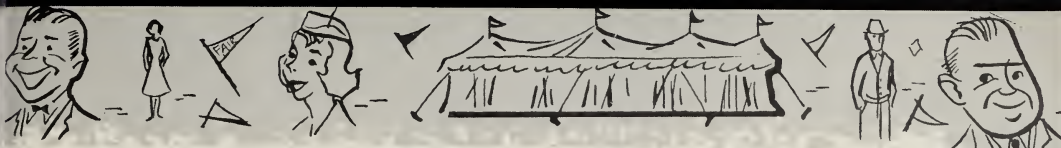


BIG DAY—Two months of advance publicity, including 5 district meetings with 17 door prizes awarded at each, helped swell attendance to 20,000 at the 22nd annual meeting of the Eastern Iowa Light and Power Cooperative, at Wilton Junction. Prizes were bought by co-op at wholesale prices. The co-op's *Current News* called the meeting "The Big Day," and the forecast proved correct. At a noontime beef barbeque, 15,000 hungry members in 12 chowlines consumed nearly 4,000 lbs. of prime beef, more than 50 cases of beans, 15,000 buns, 10,000 sacks of potato chips, enough milk to fill a barricade of milk cases. At the night session, 5,000 turned out. Crowds wandered through tentfuls of exhibits, won 175 door prizes.



FIVE BUCKS—To boost attendance at its 1957 annual meeting, Duck River EMC, Shelbyville, Tenn., offered \$5 to any home demonstration club bringing in 5 or more co-op members. The idea paid off both for the clubs and the co-op, with 29 clubs receiving a total of \$145 in bonuses.





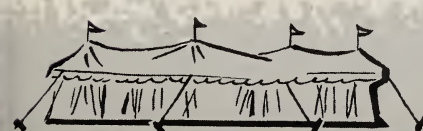
STAY-AT-HOMES—A question on a meter card helped the Butler Rural Electric Cooperative, Hamilton, Ohio, learn why some people failed to show at its 1957 annual meeting. More than 400 replied to assist the board in planning a better attended meeting next year. Among other things, 127 said they had to work; 80 were kept home by illness; 52 had other meetings or appointments; 16 were out of town; 15 had no way to come. A candid 23 consumers admitted they either forgot about the meeting or couldn't think of an excuse.



TEAM PLAY—Everybody got into the act at the 16th annual meeting of the Canadian Valley Electric Cooperative, helping to make it one of the best attended in the Seminole, Okla., co-op's history. More than 5,000 members, families, friends, and guests poured into town to attend the business meeting, visit appliance displays, and hunt for treasure. The big Treasure Hunt was sponsored by Seminole merchants and the local Chamber of Commerce for co-op members. At the meeting, key employees told their part in the co-op's operations. Appearing were the power use adviser, home adviser, office manager, line superintendent, assistant engineer, and purchasing agent.

DO-IT-YOURSELF—Professional entertainers took a back seat to member participation programs at a number of co-op annual meetings in 1957. Kentucky's co-op-a-day tour featured handicraft, beauty, and amateur talent contests, with winners at each co-op competing in statewide finals. Handicraft entries included embroidery, sculpture, quilts, baskets, hooked rugs, carpentry, and almost everything else—as long as it was portable. Each entry was designed and executed by the contestant, who had to be a member of a consumer's family. In Palisades, Neb., Southwest Public Power District held 10 days of auditions for boys and girls, picked 20 of the best numbers to compete in a 1½-hour program at its annual meeting. Winners were awarded cash prizes and the seven best acts will appear on TV during the winter season. Student actors competed on the program of the Pickwick Electric Cooperative, in Selmer, Tenn., and the Walton County EMC, Monroe, Ga., featured a tractor-driving contest for local young men.

THE MOST—*The Nora News*, sprightly paper of the Northern Rio Arriba Electric Cooperative, Chama, N. Mex., got enough people excited with well written publicity stories to draw 60 percent of the co-op's membership to the 1957 annual meeting. Many families drove 50 miles for the event.





Co-op Sets Million Man-hour Safety Record

Safety records are no accident. Blue Ridge Electric Membership Corp., Lenoir, N. C., has just completed one million man-hours without a single lost-time casualty, setting a new record among rural electrics in this country. The mark took 5 years to achieve and was the result of careful planning, good supervision and training, and individual and group action of co-op employees.

Manager C. E. Viverette has been safety-conscious for a long time. In 1944, he was named first chairman of the North Carolina Safety and Job Training Program. Presently, he serves as secretary-treasurer of the statewide association's committee on safety and job training.

The safety program for Blue Ridge EMC's 99 employees has several levels. Every 6 weeks, one of two state job training specialists visits the co-op to discuss some aspect of on-the-job safety. In addition, the co-op's supervisory staff meets once a month to study safety procedures, as well as other operational problems. Finally, individual supervisors meet with their own men for periodic safety training conferences.

Simplified Section 5 Procedures Published

While the rules of eligibility for receiving REA Section 5 loans remain unchanged, paperwork procedures for handling them have been greatly simplified.

Outlined in Revised REA Bulletin 24-1, the new policies and procedures are effective on loans made on and after September 13, 1957. The bulletin recommends that the loan amount be based on a borrower's requirements for its consumer loan program during the first 2 years—generally for not more than \$100,000.

Other important changes—

Interest on Section 5 loans, made for a period not to exceed 5 years, is due and payable annually on October 31, as it accrues.

Collections on consumer loans no

longer need be remitted to REA as received but may be retained to finance additional consumer loans during the period of the borrower's loan.

Unless a borrower is specially notified, it no longer will be required to assign its consumer obligations to the Government. However, as a condition of the loan, REA reserves the right to have the obligations assigned.

A simplified requisition and report form (REA Form 133a) does not require listing of individual consumer loans or an accompanying Opinion of Counsel.

Policies and procedures for Section 5 loans made before September 13, 1957, remain unchanged.

Rural Lines



Keeping in Touch With
Subscribers see page 16



A Letter From Norman

Talking now like a Dutch uncle, now like an old friend, the manager of a South Carolina telephone co-op keeps subscribers posted with a jaunty, informal newsletter once a month.



"Dear Members and Subscribers: We are sending your bill along with this letter to save postage. We hope you will read what we are going to write as we want to tell you about the progress your Cooperative is making . . ."

So began the first newsletter from Palmetto Rural Telephone Cooperative, Inc., Walterboro, S. C., on May 1, 1956. It was sent to to all members, signers, and prospects. Each month since, a one-page mimeographed newsletter has accompanied the monthly bill, embellished with line drawings by Manager Norman E. Spell.

Good results are being obtained at low cost with the newsletter. Spell says it costs only \$10 to \$12 a month to produce, not counting his own labor.

"Since I usually turn it out in a couple of evenings, my labor doesn't cost anything, anyway," he adds.

Keeping subscribers informed, he claims, saves a lot of foolish and

expensive trouble calls, gets bills paid earlier. "It's mighty little trouble and cost for such big benefits," he sums up.

Brief items that appear regularly in the newsletter include: Names and telephone numbers of new connections; progress reports on connections, lines built, and revenue gains; causes of service problems. An occasional item appears on the cost of sending notices on past due bills.

Palmetto's newsletter has developed a personality, and grows livelier with each succeeding issue. As a result, it is being read and enjoyed and more and more subscribers reply to it with letters of their own. It is also getting things done that need doing. There has been a decrease in delinquencies and in service complaints on party-line manners; there is improvement in subscriber interest and member loyalty.

How Manager Spell has built his "Dear Member" letters into one of

Everyone helps to stuff newsletters into billing envelopes. Hard at work, left to right, are: Floyd Webster, lineman; Mrs. Patty Whetsell, bookkeeper; Mrs. Sarah Kinsey; Gerald Webster, chief lineman; Spell, and Mrs. Minnie Weikert.



the most popular telephone newsletters being published by REA telephone borrowers is best revealed by the letters themselves.

Spell keeps them informal, signs all letters simply "Norman," and follows with a postscript like, "Confidence is the feeling you had before you knew better." In November 1957, the newsletter carried its first drawing—a fisherman leaning against a tree—to illustrate this item:

"Summer is gone and it is too late to join the 'Sons of Rest' for a few days of non-activity at their very pleasant fishing hole. Somehow, every month so far we have been denied this pleasure by the members of the Slow Poke Club. Those fellows just can't seem to get their bills paid between the 1st and the 10th. We have had to write notices, mail 'em, and wait around with all those records incomplete until the last minute. Give us a break in November and December. We have to close the books for the year."

Co-op employees got a break in both months with this follow-up appeal in the December newsletter:

"We are glad we did not have to disconnect anyone for non-payment in November. We hope all that are inclined to be SLOW in getting

their bills paid will remember that they are being served by a co-op owned by those it serves. Our rates were not set high enough to cover cost of collecting delinquent accounts. Please give us your cooperation and help us to continue operating the co-op without having to ask the Board of Directors to set up a penalty system for delinquent accounts. As you know we have been short of help. Please everyone pay your bill by the 20th."

Goals were announced in the Christmas letter: "We are doing all we can to get 1,000 connected. If you know of anyone near the line, get them to sign up at once. We are really going all out to get them connected in December. We have just unloaded the poles and we have the wire. Anyone near enough to reach with not more than one pole is almost sure to have the telephone for Christmas."

The campaign on connections was successful, and goals were nearly reached. January and February newsletters described the results, as follows:

"1956 was even better than we anticipated. We are proud of the progress our Co-op has made and want you to know that we appreciate the part you played in making 1956 such a good year (a gain of

10 Ideas for Newsletter Features

- Reports on future plans and construction progress.
- New subscribers' telephone numbers.
- Explanation of service interruptions.
- Good telephone "manners and ethics."
- Instruction on telephone use, trouble reports.
- New policies set up at board meetings.
- Promotion of auxiliary equipment.
- Report on REA loans applied for, granted, repaid.
- Efforts to prevent delinquencies.
- Promotion of special events, annual meetings, anniversaries.

258 for the year). We are depending on you to help us make 1957 bigger and better."

Confidence in membership cooperation was justified. In mid-1957 the newsletter proudly announced, "We have 1,008 telephones installed. Our July billing was \$10,316. We have passed the 1,000 mark and the \$10,000 billing mark. We are proud of our growth and thanks to every one of you for your help in establishing this much-needed service in rural sections we serve."

1957 issues promoted extras: "Have you thought about how many steps and how much time an extension will save you? The rules have been changed . . ."

"Spring is coming and you will soon be outdoors working with your flowers and gardens. A bell on the back porch will let you

know when someone is calling. The cost is only . . ."

"You can't afford to be without these conveniences. If one extension is not enough, ask about plugs and jacks for every room in the house . . . Place your order now, before the Spring rush."

"Have you seen the new telephones in color? We have them in red . . . A color for any room in the house. An extension in color for her birthday or Mother's Day. It will save her lots of time and lots of steps."

Manager Spell tried several approaches to reduce overlong telephone calls—polite, constructive, and instructive. After a year of this, he wrote briefly and bluntly, "Little children should not be allowed to use the telephone for a toy. Big boys and girls should not do all their homework and courting

15 Tips for Writing Readable Newsletters

- Keep your sentences short and simple; steer clear of the passive voice.
- Make your style informal, friendly, conversational.
- When choosing between mimeograph and the slightly more expensive photo-offset method of duplication, remember that photo-offset permits the use of photographs.
- Use standard headings, which are available even for mimeograph work.
- Leave healthy margins; avoid cluttering pages.
- For easy reading, use pica type to cut stencils.
- Use heads or captions to separate topics.
- For added interest, insert an occasional box, cartoon, or line drawing.
- In typewritten newsletters, underline key sentences or portions of sentences.
- Avoid capitalizing whole words or sentences; they are hard to read.
- Publish at the same time each month; don't skip deadlines.
- Pick the right size for easy mailing, as well as your news needs.
- Use a good 20-pound paper.
- Select white, yellow, or buff stock.
- Remember: The judicious use of a name can make a friend; a misspelled name can lose one.



Manager Spell uses a stylus to cut line drawings directly on newsletter stencil.

over the phone. Please be reasonable and treat the other fellow as you would have him treat you."

A recent newsletter carried this item on the problem:

"Girls take heart. A new angle developed recently. A man complained that another man was long-winded and monopolized the party line. Limit your conversation to 5 minutes and space your calls about 15 minutes apart."

Humor gets some ticklish points across without hurting any feelings, Spell believes. He applies it to various problems, as this sample from another newsletter shows:

"This one is on me, but it is too good to keep. Last month a regular member of the 'Pokey' club dragged out until the last hour without paying his bill. I ran into him on the street and told him we would have to have the 'Moola' or cut him off. He pulled out his check book and wrote out a check to cover his bill, apologized for being late. I thanked him and asked him for a little



At press time, Mrs. Kinsey grinds out 1000 mimeographed letters in half an hour.

closer cooperation in the future. We deposited the check. In 2 days it bounced right back, marked 'Insufficient Funds.' "

Members know that they belong to a co-op from the general tone and contents of the newsletter, but sometimes their manager spells it out in a newsletter item.

"Your Co-op is controlled by its members through a 9-man Board of Directors. The Directors hire the Manager, *etc.* The Manager runs the business and reports to the Directors at their regular monthly meetings, *etc.* We have a Bookkeeper to take care of the books, *etc.*, a Cashier to take care of the money, *etc.*, a Wire Chief who takes care of the equipment in the exchanges, *etc.* We have a Lineman and Helper whose job it is to install, service, and take care of lines, trouble calls, *etc.* (That *etc.* means, all of us do whatever is to be done to maintain and improve service to you.)"

Subscribers Will Pay for Modern Service

by Ben T. Wiggins, Member

Georgia Public Service Commission

Editor's Note: The following extracts are from an address delivered by Mr. Wiggins before the 1957 convention of the Georgia Telephone Association. It was brought to the attention of Rural Lines by John Birchmore, president and manager of the Comer Telephone Co., an REA borrower in Comer, Ga. In a letter to Administrator Hamil, Mr. Birchmore said: "I think some excerpts from this address might well be placed in Rural Lines." He suggested the italicization.

In the very near future, I believe you will find it necessary greatly to expand your outside plant facilities to keep pace with the demand for a higher grade of service, not only in urban areas, but also in those rural areas where subscribers are becoming dissatisfied with multi-party service.

After a number of investigations of complaints about the type of telephone service being furnished by some companies, the Georgia Public Service Commission has concluded that subscribers are ready and willing to pay for adequate and satisfactory telephone service. Testimony given before the commission bears out this conclusion.

I stand ready to give the company such rates as will produce a fair rate of return and which will enable the owner to provide a technically trained force and adequate facilities to serve the telephone public.

I have voted for increased rates for six companies. I have also reluctantly voted for decreased rates for two companies because evi-

dence was conclusive that satisfactory and adequate service was not being rendered subscribers. There may be others in the State rendering service which is substandard, but because of good public relations, understanding, and the subscribers' knowledge that the owner is doing something to correct the situation, subscribers have not initiated complaints against the companies.

It is certainly not our purpose to put you in a so-called "regulatory straitjacket." The responsibility for good service must rest squarely on your shoulders. The responsibility for adequate rate structures must rest squarely on our shoulders.

With the fast-growing population and expanded industrial growth, you are confronted with a great challenge which I am sure you will accept in the proper spirit. I would be most remiss in my duty if I did not heartily commend the independent telephone companies of this State on the wonderful progress they have made since the end of World War II. You have worked diligently under most try-

ing circumstances and in the face of an uncertain future . . . You have had no crystal ball to tell you how much central office equipment to add, how much cable margin to provide, or how far rural lines should be extended to care for the anticipated growth in your particular area.

Increased Value

Since the end of World War II, the independent telephone companies in Georgia have increased the value of gross plant in service from \$4,923,000 to nearly \$30,000,000 today. The number of stations has grown from 28,890 to 103,680 as of Dec. 31, 1956. I am sure that by the end of 1957, you will have passed 110,000 stations at the present rate of increase.

Now someone might ask the question: "Where did the money come from to make the expansion in plant facilities?" Well, as most of you know, it didn't come easily. Since 1950, some \$10 million has been advanced by REA—with the rest from private financing, your personal funds, salaries which have been plowed back into the business, and funds set aside for depreciation.

Since the amendment to the Rural Electrification Act in 1949 which enabled independent companies and cooperatives to borrow funds for modernization and expansion, more than \$15 million has been approved by REA for 25 Georgia borrowers. This is indicative of your initiative and foresight, and has resulted in many of our people securing needed telephone service and others obtaining a higher grade of service.

Now I want to talk to you briefly about several of your problems as we see them at the commission, and tell you how we feel some of them can be eliminated.

During the past years, some companies have filed applications for amendments to certificates of public convenience and necessity in areas somewhat adjacent to present exchange areas—but relatively close to another company's area—without first analyzing the situation or making an economic study to determine the wishes of the people. Often, when no study is made, protests are filed with the commission, resulting in expensive delays.

You will not be able to force service on people when they desire to be connected to another exchange for such reasons as larger trade areas, toll-free calls, and improved service conditions.

I fully realize there must be a boundary line between exchanges. This problem is arising more often as exchange facilities are expanded. The answer to the problem, I think, is extended area service between such exchanges, provided this can be accomplished on an economically feasible basis.

Reports Found Lacking

I have reviewed the annual reports of companies, the exhibits and testimony presented at hearings. The results of this research have provided me with several surprises, but one of my biggest surprises was to learn that some telephone companies do not have the vaguest idea about their true financial status. What is even more alarming, they don't seem to be particularly interested in finding out.

As a lawyer, I am quite aware that expediency may cause wide gaps between theoretical exactness and the common sense needs of actual practice. But no stretch of my imagination can justify some of the variances I have found in exhibits and reports presented in some cases. Some discrepancies may be summarized as follows:

1. Annual reports are not complete, and balance sheets are frequently omitted completely.
2. Many of the reports are not mathematically correct.
3. So-called appraisal inventories made at company request and expense are recorded on the books without first submitting these appraisals to the commission and having them validated.
4. Testimony given at hearings may not agree with data submitted in annual report or testimony presented in past cases.
5. Cases are often presented to the commission by consultants or engineers, who, having never done this phase of rate work, present conflicting testimony during the hearing.

There is no reason why telephone companies should not have correct records and use good sound business practices. The local businessman has to think of his profit margin if he hires an accountant or installs the latest bookkeeping methods. Some telephone companies, however, fail to comply with the rules of the commission which require that good records shall be maintained, even though these companies are aware

that the commission recognizes accounting personnel as a most necessary and proper item of expense.

Why Chance Losing?

You gain nothing by failing to keep good records. You only take a chance of losing. With records you can prove your points and know where you stand. Without them you must rely on guesses—yours and ours—and guesses have been known to be wrong. If you hire an accountant at \$6,000 a year, we provide rates to pay him. If you do not, you don't save that \$6,000. We simply reduce your rates by that amount. You don't save a thing.

The days of the old wooden magneto station on a 21-party grounded circuit are, for all practical purposes, a thing of the past. And the owner who operates his million dollar business out of his hip pocket and on a note pad should join these instruments in honorable retirement.

In this fast moving economy with its rapid technical advances, its previously unheard of capital requirements, and the complicated income tax laws, there is no place for the owner who will not keep abreast of modern business requirements. Regardless of any action taken by the commission, the sheer pressure of attempting to operate a big modern telephone system in our present economy will swamp him sooner or later.

There is another problem that has been brought to my attention. During the year 1956, 31 independent exchanges in Georgia were scheduled for conversion from manual to dial operation. It was surprising to me to learn

that only seven exchanges were converted according to schedule.

Now let us analyze just what happened. For the most part there was improper planning. Agreements were not reached soon enough between the independent and the Bell Company as to who was to furnish terminating equipment, the type of circuits, etc. Some delays were attributed to late shipment of equipment, brought about by manufacturer's work-load or changes required by the purchasers.

Let me outline to just what the commission feels should be done so that once conversion programs are scheduled, they can be met. *I cannot overemphasize the importance of early conferences with Bell Company representatives, with whom agreements should be reached with respect to what is to be done, who is to do it, and when it is to be done.*

I am informed that the average conversion will not follow much sooner than from 15 to 18 months after the final agreement has been reached. The reason for this is the load of engineering and planning after agreement has been reached, and ordering and manufacturing of equipment which is in such great demand that manufacturing is on an allocation basis.

After a complete agreement is reached, everything should be reduced to writing and everyone involved should get copies. This includes you and the Bell Company, the Rural Electrification Administration (if it is REA-financed) or the firm handling the financing, the engineering firm, the manufacturer of dial equipment, and the contractor.

Coordination committee meetings should be held, with representatives of the parties I have just mentioned. All items necessary for the conversion should be presented at the first meeting and then checked for progress at subsequent meetings.

These coordination committee meetings should be held as frequently as deemed necessary by your company and the Bell representatives. Minutes of the meeting should be furnished to everyone concerned. Holding these meetings, it has been found, will actually expedite the improvement and will avoid misunderstandings, disappointments, and possible hard feelings.

Need Trained Men

Telephone companies are confronted with a shortage of trained personnel. I believe the only answer is a realistic and efficient training program to improve the knowledge and techniques of the present employees. This will enable your company to provide better telephone service.

Therefore, I urge you to appoint a committee, and an active one, which will have an interest in this subject so that a complete and an informative study can be made of the problem. I am told the equipment manufacturers, Southern Bell, and the larger independents are anxious to cooperate so that the project will be successful. We of the commission will also assist in any way we can. Something must be done as some of the older men soon will be retired and must be replaced. Where will you get replacements? How will you train them? These are the problems which you face.

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